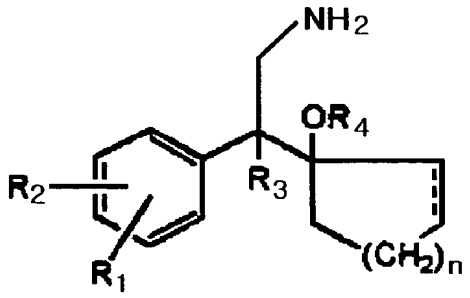
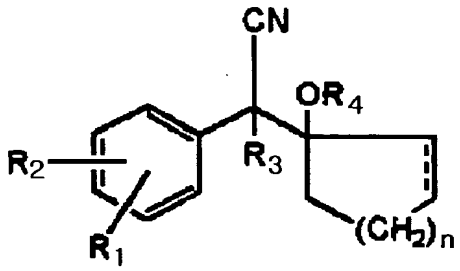
WHAT IS CLAIMED IS:

1. A process for the preparation of a compound of formula I,



(I)

wherein R_1 and R_2 are ortho or para substituents, independently selected from the group consisting of hydrogen, hydroxyl, C_1-C_6 alkyl, C_1-C_6 alkoxy, C_7-C_9 aralkoxy, C_2-C_7 alkanoyloxy, C_1-C_6 alkylmercapto, halo and trifluoromethyl; R_3 is hydrogen or C_1-C_6 alkyl ; R_4 is hydrogen, C_1-C_6 alkyl, formyl or C_2-C_7 alkanoyl; n is one of the integers 0, 1, 2, 3 or 4; and the dotted line represents optional olefinic unsaturation; comprising, hydrogenating a compound of formula III,



(III)

in the presence of a nickel or cobalt catalyst at a temperature of about 5°C to about 25°C.

2. The process of claim 1 wherein the catalyst is Raney-Ni.

3. The process of Claim 1 wherein the reaction temperature is from about 10°C to about 25°C.

4. The process of Claim 3 wherein the reaction temperature is from about 15°C to about 20°C.

5. The process of Claim 1 wherein hydrogenation is carried out in the presence of methanol, ethanol or isopropyl alcohol.

6. The process of Claim 1 wherein the amount of catalyst is from about 10 to about 50% by weight based on the amount of the compound of formula III.

7. The process of Claim 6 wherein the amount of catalyst is from about 30 to about 50% by weight based on the amount of the compound of formula III.

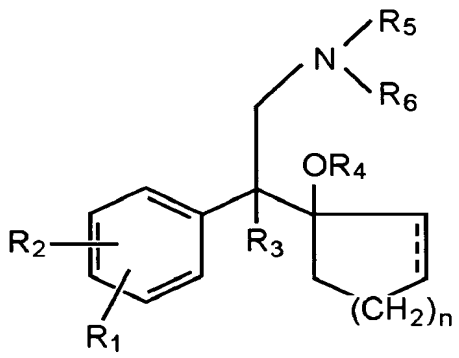
8. The process of Claim 1 wherein R_1 is hydrogen, hydroxyl, C_1-C_3 alkoxy, chloro, bromo, trifluoromethyl or C_1-C_3 alkyl; R_2 is C_1-C_3 alkyl, C_1-C_3 alkoxy, chloro, bromo, trifluoromethyl or C_2-C_3 alkanoyloxy; R_3 is hydrogen or C_1-C_6 alkyl; and R_4 is hydrogen.

9. The process of Claim 1 wherein R_1 and R_2 are in a para position, and n is 2.

10. The process of Claim 1 wherein the compound of Formula I is 1-[2-amino-1-(4-methoxyphenyl)ethyl]cyclohexanol.

11. The process of Claim 1 wherein the compound of Formula I is 1-[2-amino-1-(4-hydroxyphenyl)ethyl]cyclohexanol.

12. The process of Claim 1 further comprising alkylating the compound of formula (I) to provide compound of Formula (II)



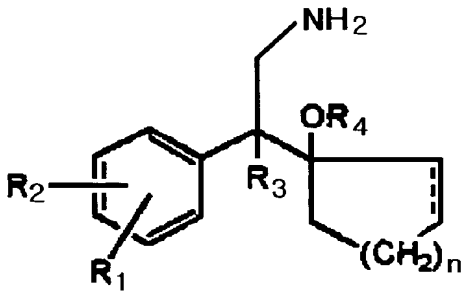
(II)

wherein R_1 and R_2 are ortho or para substituents, independently selected from the group consisting of hydrogen, hydroxyl, C_1-C_6 alkyl, C_1-C_6 alkoxy, C_7-C_9 aralkoxy, C_2-C_7 alkanoyloxy, C_1-C_6 alkylmercapto, halo and trifluoromethyl; R_3 is hydrogen or C_1-C_6 alkyl ; R_4 is hydrogen, C_1-C_6 alkyl, formyl or C_2-C_7 alkanoyl; R_5 is hydrogen or C_1-C_6 alkyl; R_6 is C_1-C_6 alkyl; n is one of the integers 0, 1, 2, 3 or 4; and the dotted line represents optional olefinic unsaturation.

13. The process of Claim 12, further comprising conversion of the compound of formula (II) to a pharmaceutically acceptable salt.

14. The process according to Claim 13, wherein the compound of formula II is venlafaxine, O-desmethylvenlafaxine, N-desmethylvenlafaxine, N,N-didesmethylvenlafaxine, N,O-didesmethylvenlafaxine or O-desmethyl-N,N-didesmethylvenlafaxine, or a pharmaceutically acceptable salt thereof.

15. A composition of formula (I) prepared according to the process of Claim 1,

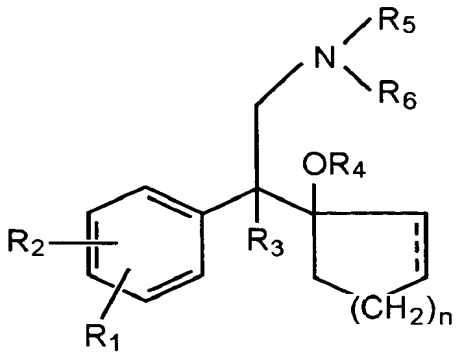


(I)

wherein R_1 and R_2 are ortho or para substituents, independently selected from the group consisting of hydrogen, hydroxyl, C_1-C_6 alkyl, C_1-C_6 alkoxy, C_7-C_9 aralkoxy, C_2-C_7 alkanoyloxy, C_1-C_6 alkylmercapto, halo and trifluoromethyl; R_3 is hydrogen or C_1-C_6 alkyl ; R_4 is hydrogen, C_1-C_6 alkyl, formyl or C_2-C_7 alkanoyl; R_5 is hydrogen or C_1-C_6 alkyl; R_6 is C_1-C_6 alkyl; n is one of the integers 0, 1, 2, 3 or 4; and the dotted line represent optional olefinic unsaturation, substantially free of phenylalkylamine impurities.

16. A composition of Claim 15 wherein the compound is 1-[2-amino-1-(4-methoxyphenyl)ethyl]cyclohexanol or 1-[2-amino-1-(4-hydroxyphenyl)ethyl]cyclohexanol.

17. A composition of formula (II) prepared according to the process of Claim 13,



(II)

wherein R_1 and R_2 are ortho or para substituents, independently selected from the group consisting of hydrogen, hydroxyl, C_1-C_6 alkyl, C_1-C_6 alkoxy, C_7-C_9 aralkoxy, C_2-C_7 alkanoyloxy, C_1-C_6 alkylmercapto, halo and trifluoromethyl; R_3 is hydrogen or C_1-C_6 alkyl ; R_4 is hydrogen, C_1-C_6 alkyl, formyl or C_2-C_7 alkanoyl; R_5 is hydrogen or C_1-C_6 alkyl; R_6 is C_1-C_6 alkyl; n is one of the integers 0, 1, 2, 3 or 4; and the dotted line represents optional olefinic unsaturation, or a pharmaceutically acceptable salt thereof, said composition being substantially free of phenylalkylamine impurities.

18. The composition of Claim 17 wherein the compound is venlafaxine, N-desmethylvenlafaxine, N,N-didesmethylvenlafaxine, or a pharmaceutically acceptable salt thereof, substantially free of 4-methoxyphenethylamine impurities.

19. The composition of Claim 17 wherein the compound is O-desmethylvenlafaxine, N,O-didesmethylvenlafaxine, O-desmethyl-N,N-didesmethylvenlafaxine, or a pharmaceutically acceptable salt thereof, substantially free of 4-methoxyphenethylamine impurities.